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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/821,553	03/29/2001	Robert M. Spotnitz	5512.1	5867

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EXAMINER

BORISSOV, IGOR N

ART UNIT PAPER NUMBER

3629

DATE MAILED: 07/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/821,553

Applicant(s)

SPOTNITZ ET AL.

Examiner

Igor Borissov

Art Unit

3629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/01/04 has been entered.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**Claims 1-6 are rejected under 35 U.S.C. 102(e) as being anticipated by Notten et al. (US 6,016,047).**

Notten et al. (hereinafter Notten) teaches a method and system for a battery simulator, comprising:

**As per claim 1,**

providing more than one model of digital circuit, the model adapted to convert at least one customer inputted requirement (input) into at least one output (column 1, lines 16-35; column 10, lines 5-46);

providing an interface, the interface being adapted to pass input to the model, the interface being adapted to pass output from the model, said interface is inherently being adapted to hide the model (column 10, lines 5-46);

wherein the customer addresses the interface with the input, the interface directs the input to at least one of the models, the model generates the output that passes through the interface to the customer (column 10, lines 5-46),

and wherein said at least one customer input includes ambient temperature and battery temperature which is used to model battery temperature not to exceed allowed temperature range of operation (column 3, lines 20-62).

**As per claims 2 and 5**, said method and system, wherein the model is selected from the group consisting of first principles' models, empirically-based models, and hybrid models consisting of combinations of first principles' models and empirically based models (column 3, lines 1-11).

**As per claim 3**, said method and system, wherein said customer input further comprise a plurality of said customer inputs (column 10, lines 7-11).

**As per claim 4**, said method and system, wherein the output further comprises a plurality of outputs (column 10, lines 5-46).

**As per claim 6**, said method and system, wherein the output further comprises a design of the charge storage device (column 6, lines 40-42).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Notten et al. (US 6,016,047).**

**As per claim 7.**

providing an interface, the interface for customer inputted testing procedure for the charge storage device (column 25, lines 35-38).

providing a plurality of charge storage device models (column 1, lines 16-35; column 10, lines 5-46);

wherein the customer addresses the interface with the inputted requirements (input), the interface directs the input to at least one of the models, the model generates the output that passes through the interface to the customer (column 10, lines 5-46),

and wherein said at least one customer input includes ambient temperature and battery temperature which is used to model battery temperature not to exceed allowed temperature range of operation (column 3, lines 20-62).

Notten does not explicitly address confidentiality of said models.

Official notice is taken that it is a well known fact that proprietary information/parameters related to the specifics of the software/models are kept confidential from customers.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Notten et al. to include that said models are kept confidential from the customer, because it would allow the developers of said models to remain competitive on the market, thereby generate more profit.

**As per claim 8**, providing an interface, the interface for testing procedure for the charge storage device (column 25, lines 35-38)

**As per claim 9**, Notten teaches said method and system, wherein the model further comprises a sizing program and a performance program (column 10, lines 5-46).

**As per claim 10**, Notten obviously teaches that the model further comprises an abuse program (column 25, lines 1-13).

**As per claim 11**, Notten obviously teaches that executing a simulation further comprises the step of optimizing the simulation (column 6, lines 58-59; column 10, lines 35-37; column 25, lines 35-39).

**As per claim 12**, Notten obviously teaches that outputting the custom charge storage device design further comprises the step of reporting the design (column 1, lines 16-35; column 10, lines 5-46).

### ***Response to Arguments***

Applicant's arguments filed 1/22/04 have been fully considered but they are not persuasive.

In response to applicant's argument that Notten fails to disclose that the customer inputted requirement includes *temperature range of operation*, examiner points out that Notten explicitly teach importance of *allowed temperature range* for desired battery design. Knowing said temperature range, Notten's system allows to model the temperature behaviour of the battery (employing input parameters representing the battery temperature and the ambient temperature) not to exceed said allowed temperature range (C. 3, L. 20-25, 27-30, 38-39, 54-62).

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure (see form PTO-892).

The best foreign prior art uncovered by the examiner: EP 1150222 A2 to Gluss et al, disclosing a method of integrated circuit design of cell blocks.

Any inquiry concerning this communication should be directed to Igor Borissov at telephone number (703) 305-4649.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Receptionist whose telephone number is (703) 872-9306.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, John Weiss, can be reached at (703) 308- 2702.

Any response to this action should be mailed to:

***Commissioner of Patents and Trademarks***

***Washington D.C. 20231***

or faxed to:

**(703) 872-9306** [Official communications; including After Final  
communications labeled "Box AF"]

Hand delivered responses should be brought to Crystal Park 5, 2451 Crystal Drive, Arlington, VA, 7<sup>th</sup> floor receptionist.

  
DENNIS RUHL  
PRIMARY EXAMINER